

US Army Corps of Engineers

Portland District



Corps of Engineers and National Marine Fisheries Service: Project Design Overview for Habitat Restoration Projects



National Marine Fisheries Service Northwest Region

Issue Date: August 14, 2009

Statutory Requirements: The Portland District Corps of Engineer's (Corps) Regulatory Program evaluates applications for Department of the Army (DA) permits to perform work in "waters of the United States" (throughout the State of Oregon. The Corps regulatory authorities are found in the following:

Section 10, Rivers and Harbors Act 1899 (33 U.S.C. 403), for work in or affecting navigable waters of the United States.

Section 404, Clean Water Act (33 U.S.C. 1344), for discharge of dredged or fill material into waters of the United States.

Section 103, Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413), for the transport of dredged material for the purpose of dumping it into ocean waters.

In exercising its regulatory responsibilities the Corps must ensure its permit decisions comply with other applicable Federal laws including the **Endangered Species Act** (ESA) and the **Magnuson-Stevens Fishery Conservation and Management Act** (MSA). Both Acts require federal agencies including the Corps to consult with the National Marine Fisheries Service (NMFS) to insure any action authorized by the Corps is not likely to jeopardize the continued existence of species listed under the ESA or destroy or adversely modify the designated critical habitat or essential fish habitat (EFH) of these species.

Programmatic ESA Coverage: Some habitat restoration projects may have ESA and MSA coverage through a programmatic consultation between the Corps and NMFS titled "Revisions to Standard Local Operating Procedures for Endangered Species to Administer Stream Restoration and Fish Passage Improvement Activities Authorized or Carried Out by the U.S. Army Corps of Engineers in the Oregon" (SLOPES IV Restoration). Designing your project to conform to these standards and providing the information specified will help expedite the agencies' review even if it is not covered by this programmatic consultation. Detailed construction implementation plans may be required.

1. Determine Whether Fish Are Present: Nearly all anadromous fish-bearing streams within the Corps' jurisdiction are occupied by ESA-listed salmon and steelhead and are designated as EFH for Chinook salmon and coho salmon. Green sturgeon are found in marine waters and in the lower estuaries.

2. Designing the Project: Nearly all anadromous fish-bearing streams within the Corps' jurisdiction are occupied by ESA-listed salmon and steelhead and are designated as EFH for Chinook salmon and coho salmon. Green sturgeon are found in marine waters and in the lower estuaries.

The following types of projects may be covered by this programmatic consultation:

Boulder Placement to increase habitat diversity and complexity, improve flow heterogeneity, provide substrate for aquatic vertebrates, moderate flow disturbances, and provide refuge for fish during high flows by placing large boulders in stream beds where similar natural rock has been removed.

Fish Passage Restoration to improve fish passage by installing or improving step weirs, fish ladders, or lamprey ramps at an existing facility, or replacing or improving culverts.

Spawning Gravel Restoration to improve spawning substrate by compensating for an identified loss of a natural gravel supply.

Large Wood Restoration to increase coarse sediment storage, habitat diversity and complexity, retain gravel for spawning habitat, improve flow heterogeneity, provide long-term nutrient storage and substrate for aquatic macroinvertebrates, moderate flow disturbances, increase retention of leaf litter, and provide refuge for fish during high flows by placing large wood in areas where natural wood accumulations have been removed.

Off- and Side-Channel Habitat Restoration to reconnect stream channels with floodplains, increase habitat diversity and complexity, improve flow heterogeneity, provide long-term nutrient storage and substrate for aquatic macroinvertebrates, moderate flow disturbances, increase retention of leaf litter, and provide refuge for fish during high flows by restoring or modifying hydrologic and other essential habitat features of historical river floodplain swales, abandoned side channels, and floodplain channels.

Piling Removal to improve water quality by eliminating chronic sources of toxic contamination.

Set-back Existing Berms, Dikes, and Levees to reconnect stream channels with floodplains, increase habitat diversity and complexity, moderate flow disturbances, and provide refuge for fish during high flows by increasing the distance that existing berms, dikes or levees are set back from active streams or wetlands.

Streambank Restoration to restore eroding streambanks by (a) bank shaping and installation of coir logs or other soil reinforcements as necessary to support riparian vegetation; (b) planting or installing large wood, trees, shrubs, and herbaceous cover as necessary to restore ecological function in riparian and floodplain habitats; or (c) a combination of the above methods.

Water Control Structure Removal to reconnect stream corridors, reestablish wetlands, improve fish passage, and restore more natural channel and flow conditions, by removing earthen embankments, subsurface drainage features, spillway systems, tide gates.

3. Assess Your Construction Techniques and Develop Contingencies: The assessments and plans described below must be included in your application package. The level of detail necessary will depend upon the nature and scope of your action:

- a. <u>Site Assessment for Contaminants.</u> Sites where substantial earthmoving is proposed must be assessed for potential contamination. Applicants should review readily available records to determine former use and for record of any prior contamination sources. The assessment must describe the type, quantity, and extent of any contaminates believed or known to be present, if none please state.
- **b.** <u>Construction Staging and Vehicle Fueling Locations:</u> Identify the location of staging areas. All vehicles and other heavy equipment must be stored, fueled, and maintained in a staging area placed 150 feet or more from any waterbody or wetland and be inspected daily for fluid leaks before leaving the staging area.
- c. Work Area Isolation Plan: A work area within the wetted channel will be completely isolated from the active stream whenever a fish is reasonably certain to be present, or if the work area is 300 feet or less upstream from spawning habitats. Boulder placement and large wood restoration actions are exempted from this requirement. The Plan must contain the following: (a) the name, phone number, an address of the person responsible for accomplishing each plan component; (b) an estimate of likely stream flows during isolation; (c) a plan view of all isolation elements and fish release areas; (d) a list of equipment and materials necessary to complete the plan, including a fish screen; and (e) the sequence and schedule of dewatering and rewatering activities. Pumps must have screens which meet NMFS criteria (NMFS 1996).
- d. Erosion and Pollution Control Plan. The Plan shall contain the following information: (a) the name, phone number, an address of the person responsible for accomplishing the plan; (b) best management practices to confine vegetation and soil disturbance to the minimum area, and minimum length of time, as necessary to complete the action, and otherwise prevent or minimize erosion associated with the action; and (c) best management practices to confine, remove, and dispose of construction waste, including every type of debris. discharge water, concrete, cement, grout, washout facility, welding slag, petroleum product, or other hazardous materials generated, used, or stored on-site.
- e. Site Restoration Plan. The Plan must include drawings. Any large wood, native vegetation, topsoil, and native channel material displaced by construction will be stockpiled for use during site restoration. When construction is finished, all streambanks, soils, and vegetation will be cleaned up and restored as necessary to renew ecosystem processes that form and maintain productive fish habitats. Fencing will be installed as necessary to prevent access to revegetated sites by livestock or unauthorized persons.

Questions regarding the Corps' Regulatory Program should be directed the Corps project manager assigned to the county in which the project is located. A list of the telephone numbers by county assignment is attached and may be found at: https://www.nwp.usace.army.mil/op/g/home.asp.

Regulatory Staff Contacts

Application Review Section (Portland)

Section Chief (503) 808-4385

Project Manager – Clatsop, Tillamook Counties (503) 808-4392

Project Manager – Morrow, Umatilla, Union, Wallowa, Grant, Baker, Malheur, Gilliam, and Wheeler Counties (541) 962-0401

Project Manager - Sherman, Hood River, Wasco, and Jefferson Counties (503) 808-4391

Project Manager – Columbia and Lincoln Counties (503) 808-4376

Project Manager – Clackamas and Marion Counties (503) 808-4398

Project Manager - Washington, Yamhill, and Polk Counties (503) 808-4368

Project Manager – Multnomah County, Port of Portland, and Port of Vancouver (503) 808-4386

Application Review Section (Eugene)

Section Chief (541) 465-6877

Project Manager – Linn, Jackson, and Lake Counties (541) 465-6878

Project Manager – Benton and Lane Counties (541) 465-6769

Project Manager – Douglas and Josephine Counties (541) 465-6882

Project Manager – Deschutes, Crook, and Klamath Counties (541) 465-6765

Project Manager – Curry, Coos, and Coastal Lane Counties (541) 756-2097

Project Manager – Harney County

Policy and Compliance Section

Section Chief (503) 808-4377

Project Manager – Clatsop, Washington, Lincoln, Marion, Jefferson, Gilliam, Morrow, Umatilla, Union, Wallowa, Wheeler, Grant, and Baker Counties– (503) 808-4389

Project Manager – Columbia, Multnomah, Hood River, Sherman, Tillamook, Yamhill, Polk, Clackamas, and Wasco Counties (503) 808-4387

Project Manager – Benton, Linn, Lane, Deschutes, Crook, Klamath, Lake, Harney, and Malheur Counties (541) 465-6894

Project Manager – Coos, Curry, Douglas, Josephine, Jackson, and Coastal Lane Counties (541) 756-5316

Project Manager – Jurisdictional Specialist (503) 808-4381

Project Manager - Special Projects (503) 808-4382

Project Manager – Mitigation (503) 808-4383

Statewide ODOT Permit Coordinator

ODOT Permit Coordinator - Region 1 & 3 (503) 808-4390

ODOT Permit Coordinator – Region 2 & 4 (503) 808-4379